

Datasheet for ABIN3096229

USP16 Protein (AA 1-823) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	USP16
Protein Characteristics:	AA 1-823
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This USP16 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MGKKRTKGKT VPIDDSSETL EPVCRHIRKG LEQGNLKKAL VNVEWNICQD CKTDNKVKDK AEEETEEKPS VWLCLKCGHQ GCGRNSQEQH ALKHYLTPRS EPHCLVLSLD NWSVWCYVCD NEVQYCSSNQ LGQVVDYVRK QASITTPKPA EKDNNGNIELE NKKLEKESKN EQEREKKENM AKENPPMNSP CQITVKGLSN LGNTCFFNAV MQNLSQTPVL RELLKEVKMS GTIVKIEPPD LALTEPLEIN LEPPGPLTLA MSQFLNEMQE TTKGVVTPKE LFSQVCKKAV RFKGYQQQDS QELLRYLLDG MRAEEHQ RVS KGILKAFGNS TEKLDEELKN KVKDYEEKKS MPSFVDRIFG GELTSMIMCD QCRTVSLVHE SFLDLSLPVL DDQSGKKSVN DKNLKKTVED EDQDSEEEKD NDSYIKERSD IPSGTSKHLQ KKAKKQAKKQ AKNQRRQQKI QGKVLHLNDI CTIDHPEDSE YEAEMSLQGE VNIKSNHISQ EGV MHKEYCV NQKDLNGQAK MIESVTDNQK STEEVD MKNI NMDNDLEVL TSSPTRNLNGA YLTEGSNGEV DISNGFKNLN LNAALHPDEI NIEILNDSHT PGTKVYEVVN EDPETAFTL ANREVFNTDE CSIQHCLYQF TRNEKLRDAN KLLCEVCTRR QCNGPKANIK GERKHVYTNA KKQMLISLAP PVLT LHLKRF QQAGFNLRKV NKHIKFPEIL
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DLAPFCTLKC KNVAEENTRV LYSLYGVVEH SGTMRSGHYT AYAKARTANS HLSNLVLHGD
IPQDFEMESK GQWFHISDTH VQAVPTTKVL NSQAYLLFYE RIL

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	USP16
Alternative Name:	USP16 (USP16 Products)
Background:	Ubiquitin carboxyl-terminal hydrolase 16 (EC 3.4.19.12) (Deubiquitinating enzyme 16) (Ubiquitin thioesterase 16) (Ubiquitin-processing protease UBP-M) (Ubiquitin-specific-processing protease 16),FUNCTION: Specifically deubiquitinates 'Lys-120' of histone H2A (H2AK119Ub), a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator (PubMed:17914355). Deubiquitination of histone H2A is a prerequisite for subsequent phosphorylation at 'Ser-11' of histone H3 (H3S10ph), and is required for chromosome segregation when cells enter into mitosis (PubMed:17914355). In resting B- and T-lymphocytes, phosphorylation by AURKB leads to enhance its activity, thereby maintaining transcription in resting lymphocytes. Regulates Hox gene expression via histone H2A deubiquitination (PubMed:17914355). Prefers nucleosomal substrates (PubMed:17914355). Does not deubiquitinate histone H2B (PubMed:17914355). Also deubiquitinates non-histone proteins, such as ribosomal protein RPS27A: deubiquitination of monoubiquitinated RPS27A promotes maturation of the 40S ribosomal subunit (PubMed:32129764). {ECO:0000255 HAMAP-Rule:MF_03062, ECO:0000269 PubMed:17914355, ECO:0000269 PubMed:32129764}.
Molecular Weight:	93.6 kDa
UniProt:	Q9Y5T5

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process